

What is claimed is:

1. A packet communication system comprising first and second packet communication devices that are arranged in at least first and second foreign networks, respectively,
5 among a plurality of foreign networks existing as networks visited by the mobile node, wherein

when the mobile node has moved to the first foreign network, a first care-of address is given to the mobile node, when the mobile node has moved to the second foreign network,
10 a second care-of address is given to the mobile node, and after the mobile node has moved from the first foreign network to the second foreign network, when a packet addressed to the first care-of address is transmitted, the first packet communication device forwards the packet to the
15 second packet communication device.

2. The packet communication system according to claim 1, wherein

when the mobile node has moved from the first foreign
20 network to the second foreign network, information pertinent to the second care-of address is sent to the first packet communication device.

3. A packet communication system comprising packet
25 communication devices that are arranged in a plurality of

foreign networks, respectively, that are at least part of foreign networks existing as networks visited by a mobile node, wherein

when the mobile node moved among the plurality of
5 foreign networks, if the packet communication device is arranged in a visited foreign network, the mobile node is given a care-of address that corresponds to the visited foreign network one by one, and

the mobile node continuously sends information
10 pertinent to the care-of address given in the visited foreign network after moving to a plurality of foreign networks from the predetermined foreign network to at least one of the packet communication devices arranged in the foreign networks in which the mobile node resided
15 previously.

4. The packet communication system according to claim 3, wherein

at at least any point of time selected from a group
20 consisting of points of time when applications are started in the mobile node and points of time when the applications having been started in the mobile node start to exchange packets via the Internet, the mobile node sends continuously information pertinent to its care-of address that is
25 acquired when, after residence in one foreign network, the

mobile node has moved to another foreign network to a packet communication device that was in service at the start of the application and is a packet communication device existing on the foreign network in which the mobile node resided.

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5. The packet communication system according to claim 4, wherein

the mobile node stops continuation of sending of the information to the packet communication device that was in service at the start of the application after the application is ended.

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6. The packet communication system according to claim 3, wherein

the packet communication device that will be a target to which the information is sent continuously is selected in correspondence with at least either a state of or a communication purpose of the foreign network in which the moved mobile node resides.

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7. The packet communication system according to claim 3, wherein

when the number of hops between the packet communication device when the information started to be transmitted and the packet communication device existing on

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the foreign network in which the mobile node resides exceeds a predetermined value, continuation of sending of the information is stopped.

5 8. The packet communication system according to claim 3, further comprising conditions setting means that allows the user of the mobile node to set conditions in advance, wherein
when the conditions being set by the condition setting means are satisfied, continuation of sending of the
10 information is stopped.

9. A communication network comprising first and second packet communication devices that are arranged in at least first and second foreign networks, in a corresponding
15 manner, among a plurality of foreign networks existing as networks visited by a mobile node, wherein

when the mobile node has moved to the first foreign network, a first care-of address is given to the mobile node,
when the mobile node has moved to the second foreign
20 network, a second care-of address is given to the mobile node, and

after the mobile node has moved from the first foreign network to the second foreign network, when a packet addressed to the first care-of address is transmitted, the

packet is forwarded from the first packet communication device to the second packet communication device.

10. A communication network comprising packet
5 communication devices that are arranged in a plurality of foreign networks, respectively, that are at least part of foreign networks existing as networks visited by a mobile node, wherein

when the mobile node moved among the plurality of
10 foreign networks, if the packet communication devices are arranged in the visited foreign networks, a care-of address corresponding to each of the visited foreign networks is given to the mobile node one by one, and

after moving further from a predetermined foreign
15 network to a plurality of foreign networks, information pertinent to the care-of address given by the visited foreign network is continuously sent from the mobile node to at least one of the packet communication devices each of which is arranged on each of foreign networks in which the
20 mobile node resided previously.

11. A method for selecting an IP address in a mobile node comprising the steps of:

arranging first and second packet communication
25 devices in at least first and second foreign networks, in

a corresponding manner, among a plurality of foreign networks existing as networks visited by the mobile node;

giving a first care-of address to the mobile node when the mobile node has moved to the first foreign network and
5 a second care-of address to the mobile node when the mobile node has moved to the second foreign network, respectively; and

after the mobile node moved from the first foreign network to the second foreign network, when a packet
10 addressed to the first care-of address is transmitted to the first foreign network, forwarding the packet to the second packet communication device from the first packet communication device.

15 12. A method for selecting an IP address in a mobile node comprising the steps of:

arranging packet communication devices in a plurality of foreign networks that are at least part of foreign networks existing as networks visited by the mobile node,
20 respectively;

when the mobile node moves among the plurality of foreign networks, if the packet communication device is arranged in a visited foreign network, giving the mobile node a care-of address that corresponds to the visited
25 foreign network one by one; and

after the mobile node moved further from a
predetermined foreign network to a plurality of foreign
networks, sending information pertinent of the care-of
address given in a visited foreign network continuously from
5 the mobile node to at least one of the packet communication
devices each of which is arranged in each of foreign networks
in which the mobile node resided previously.